REMARKS

The Office Action of September 23, 2003 has been received and its contents carefully considered.

Claims 1 to 14 are all the claims pending in the application, prior to the present amendment.

The Examiner states that the present specification should be amended to state that "This application is a 371 of PCT/JP02/02797, filed 3/22/2001."

Applicants disagree that the present application should be amended to refer to the PCT Application in the first sentence of the specification. The MPEP § 1893.03(c), at page 1800-156, makes it clear that there is no need for the national stage entry of a PCT Application to refer in the first sentence to the PCT Application. Accordingly, applicants request withdrawal of this objection.

The Examiner states that the Search Report has been considered. Applicants understand this statement to mean that the Examiner has considered the International Search Report for this application.

Applicants are submitting concurrently herewith an Information Disclosure Statement with an International Search Report and the copies of the references cited therein.

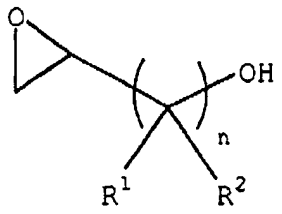
Claims 1-6 have been rejected under 35 U.S.C. § 102(b) as anticipated by Fiedler.

Applicants have amended claim 1 to incorporate the subject matter of claims 4 and 5 which have been cancelled.

Applicants submit that the present invention as set forth in claim 1 as amended above is not disclosed or suggested by Fiedler and, accordingly, request withdrawal of this rejection.

Claim 1 as amended above is directed to a carrier-containing catalyst which contains at least one element selected from the group consisting of Group V elements, Group VI elements, Group VII elements, Group VIII elements, Group IX elements, Group X elements, and Group XI elements in the periodic table, and is to be used for subjecting an epoxy alcohol represented by the following general formula (1) to a hydrogenolysis reaction in the presence of at least one solvent selected from the group consisting of ethers, esters, aromatic hydrocarbon compounds, alicyclic hydrocarbon compounds and aliphatic hydrocarbon compounds, to thereby obtain a both endhydroxyl group-terminated diol represented by the following general formula (2).

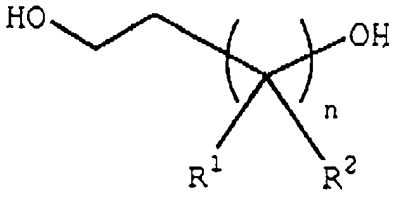
General formula (1) :



(1)

wherein R^1 and R^2 each independently represents hydrogen, an alkyl group having 1 to 8 carbon atoms, a cycloalkyl group having 3 to 10 carbon atoms, or an aryl group having 6 to 13 carbon atoms and n represents an integer of 1 to 6;

General formula (2):



(2)

wherein R^1 and R^2 each independently represents hydrogen, a cycloalkyl group, an aryl group or an alkyl group having 1 to 8 carbon atoms, and n represents an integer of 1 to 6), and wherein the carrier comprises as least one species selected from the group consisting of: activated carbon, alumina, silica, silica alumina, zeolite, diatomaceous earth, titania, and zirconia.

According to the present invention, a both end-hydroxyl group-terminated diol (e.g., propanediol) having an extremely low carbonyl impurity content can be produced with high efficiency, by using the catalyst set forth in claim 1 for producing the both end-hydroxyl group terminated diols.

Further, the both end-hydroxyl group-terminated diols which can be obtained by the production process for such diols (particularly, 1,3-propanediol) according to the present invention have a high purity as compared with the 1,3-propanediols which had been obtained by conventional methods. See page 66, line 37 to page 67, line 12 of the present specification.

Fiedler does not teach or suggest a carrier-containing catalyst for treating an epoxy alcohol represented by the above general formula (1), which contains at least one element selected from the group consisting of Group V elements, Group VI elements, Group VII elements, Group VIII elements, Group IX elements, Group X elements, and Group XI elements.

Fiedler discloses a method for preparing a catalytic metal foam by providing a molten pool of metal alloy. The Fiedler metal alloy foam consists of nickel and a metal or metals which may be easily removed from the alloy. The metals which may be used in the alloy include aluminum. The removal of the aluminum provides a catalytic metal foam of nickel.

Fiedler also discloses at column 1, lines 17-24, a prior art catalytic material in the form of a metal sponge which has been prepared by leaching a 50% aluminum-50% nickel alloy with a warm caustic soda solution.

However, Fiedler does not teach or suggest a carrier-containing catalyst for treating an epoxy alcohol represented by the above general formula (1), which contains at least one element selected from the group consisting of Group V elements, Group VI elements, Group VII elements, Group VIII elements, Group IX elements, Group X elements, and Group XI elements.

Thus, Fiedler does not disclose a carrier-containing catalyst or the specific carriers recited in claim 1.

Accordingly, applicants submit that Fiedler does not disclose or render obvious the present invention and, therefore, request withdrawal of this rejection.

Claims 1-4 have been rejected under 35 U.S.C. § 102(b) as anticipated by Suzuki.

Applicants submit that the present invention as set forth in claim 1 as amended above is not disclosed or suggested by Suzuki and, accordingly, request withdrawal of this rejection.

Suzuki does not teach or suggest a carrier-containing catalyst for treating an epoxy alcohol represented by the above general formula (1), which contains at least one element

selected from the group consisting of Group V elements, Group VI elements, Group VII elements, Group VIII elements, Group IX elements, Group X elements, and Group XI elements.

Suzuki discloses a process for producing a primary alcohol from a epoxide, which comprises contacting the epoxide with hydrogen and a solid catalyst comprising nickel or cobalt.

However, Suzuki only shows a catalyst which has a selectivity with respect to epoxide compounds having a group R' of hydroxy alkyl or C_1-C_5 alkyl (i.e., those having R' groups other than R'=H), as described in claim 1 of Suzuki.

On the contrary, the catalyst according to the present invention has a selectivity with respect to epoxide compounds represented by the above formula (1), (i.e., those corresponding to R'=H in the Suzuki's formula as described in claim 1 of Suzuki). Accordingly, Suzuki only teaches a catalyst having a selectivity which is contrary to that of the catalyst according to the present invention.

Accordingly, applicants submit that Suzuki does not disclose or render obvious the present invention and, therefore, request withdrawal of this rejection.

Claim 7 has been objected to as being an improper multiple dependent claim and therefore, has not been treated on the merits.

Applicants have amended claim 7 so that it depends from claim 1 only. Accordingly, applicants request withdrawal of this rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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Date: December 23, 2003